

REMARKS

Applicants respectfully request reconsideration of the application, as amended, in view of the following remarks.

The present invention as set forth in **amended Claim 1** relates to a sheet, comprising:
a resin composition comprising

an elastomeric styrene polymer,

component (B1),

component (B2), and

component (B3),

in a mass ratio of elastomeric styrene polymer to the total amount of components (B1), (B2) and (B3) of from 98/2 to 80/20;

wherein said elastomeric styrene polymer comprises

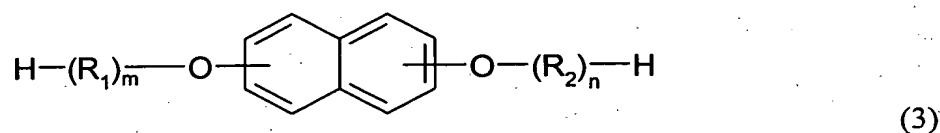
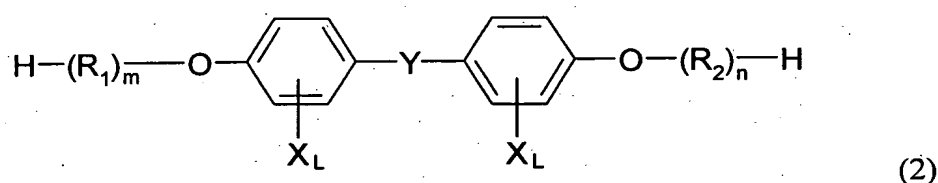
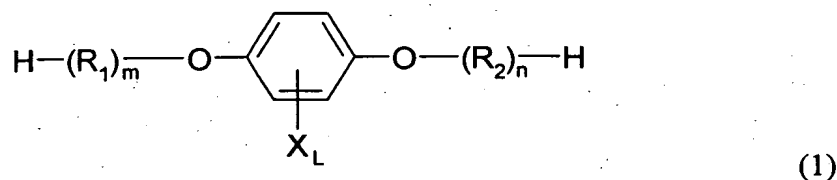
(I) from 40 to 95 parts by mass of a continuous phase of a copolymer comprising from 20 to 80 mass% of styrene monomer units, from 80 to 20 mass% of (meth)acrylate monomer units and from 0 to 10 mass% of units of other vinyl monomers copolymerizable with such monomers, and

(II) from 60 to 5 parts by mass of a dispersed phase of a graft copolymer having from 20 to 90 parts by mass of graft branches of a copolymer comprising from 20 to 80 mass% of styrene monomer units, from 80 to 20 mass% of (meth)acrylate monomer units and from 0 to 10 mass% of units of other vinyl monomers copolymerizable with such monomers, grafted to from 10 to 80 parts by mass of an elastomer,

wherein the volume average particle size of the dispersed phase is from 0.1 to 0.6 μm , and the difference in the refractive index between the continuous phase and the dispersed phase is not more than 0.05;

wherein component (B1) is an aminocarboxylic acid having at least 6 carbon atoms, a lactam, or a salt of a diamine with a carboxylic acid, having at least 6 carbon atoms;

wherein component (B2) is at least one diol compound selected from the following chemical formulae (1) to (3):



wherein R_1 is an ethylene oxide group, R_2 is an ethylene oxide group or a propylene oxide group, Y is a covalent bond, a C_{1-6} alkylene group, a C_{1-6} alkylidene group, a C_{7-17} cycloalkylidene group, a C_{7-17} arylalkylidene group, O, SO, SO_2 , CO, S, CF_2 , $\text{C}(\text{CF}_3)_2$ or NH, L in X_L is an integer of from 1 to 4, and each of m and n is an integer of at least 16; and

wherein component (B3) is a polyether ester amide having a C_{4-20} dicarboxylic acid copolymerized.

Claim 5 relates to a multilayer sheet, which comprises:

a substrate layer of an elastomeric styrene polymer comprising from 1 to 20 parts by mass of a dispersed phase of an elastomer comprising from 30 to 50 mass% of styrene monomer units and from 70 to 50 mass% of butadiene monomer units, and from 99 to 80 parts by mass of a continuous phase of a polymer comprising from 35 to 75 mass% of styrene monomer units and from 65 to 25 mass% of (meth)acrylate monomer units, and

a surface layer of a styrene polymer comprising from 35 to 75 mass% of styrene monomer units and from 65 to 25 mass% of (meth)acrylate monomer units, formed on each side of the substrate layer.

In contrast, Auclair (US 5,932,655), Ueyama (US 5,284,884) and Ueda (US 5,886,098) fail to disclose or suggest sheets as claimed, having the **claimed mass ratio of elastomeric styrene polymer to the total amount of components (B1), (B2) and (B3) of from 98/2 to 80/20; wherein the volume average particle size of the dispersed phase is from 0.1 to 0.6 μm , and the difference in the refractive index between the continuous phase and the dispersed phase is not more than 0.05;**

Auclair does not disclose or suggest the use of components (B1), (B2) and (B3) in the claimed mass ratio. There is nothing in the disclosure of Ueda or Ueyama suggesting that some of the starting materials remain in the final product as stated by the Examiner. In addition, superior results of the present invention are shown in the Examples.

The sheet of the present invention is excellent in productivity and can give a formed product excellent in transparency, impact strength and recycling properties.

The importance of volume average particle size of the dispersed phase is from 0.1 to 0.6 μm and the difference in the refractive index between the continuous phase and the dispersed phase of not more than 0.05 is discussed starting at page 9, line 25 to page 10 of the specification. The volume average particle size and the claimed difference in the refractive index are important to achieve superior impact strength and transparency.

In addition, the claimed proportion of elastomeric styrene polymer to the total amount of components (B1), (B2) and (B3) of from 98/2 to 80/20 is important to achieve superior antistatic properties while maintaining an excellent impact strength. See paragraph bridging pages 13 and 14 of the specification.

Notably, when proportions outside the claimed scope are used, impact strength, haze, forming properties are inferior. See Examples 1-3 and Comparative Examples 1 and 2 in Tables 2 and 3 at pages 26 and 27 of the specification.

Further, the sheets of Examples 4 to 9 (Table 6 on page 38 of the specification) are superior in productivity and, when formed into cups by vacuum forming, give cup shaped products superior in transparency, impact strength and recycling properties, to the sheets of Comparative Examples 3 to 7 (Table 6 on page 39 of the specification).

The sheets of Examples 10 to 13 (Table 8 on page 40 of the specification) give, when formed into carrier tapes by air-pressure forming, more transparent carrier tapes than the sheets of Comparative Examples 8 to 10 (Table 9 on page 41 of the specification).

Such superior properties are not disclosed or suggested by Auclair, Ueyama and Ueda.

Therefore, the rejection of Claims 1-14 under 35 U.S.C. § 103(a) over Auclair (US 5,932,655) in view of Ueyama (US 5,284,884) and Ueda (US 5,886,098) is believed to be unsustainable as the present invention is neither anticipated nor obvious and withdrawal of this rejection is respectfully requested.

The rejection of Claims 1-4 and 7-12 under 35 U.S.C. § 112, 2nd paragraph, is obviated by the amendment of the claims.

The objection to the abstract is traversed. The abstract was indeed submitted on a separate page when the application was filed. Note that the abstract is on page 47 of the application. Thus, this objection should be withdrawn.

Application No.: 10/505,447

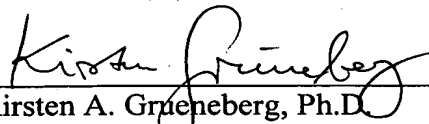
Reply to Office Action of: June 29, 2006

This application presents allowable subject matter, and the Examiner is kindly requested to pass it to issue. Should the Examiner have any questions regarding the claims or otherwise wish to discuss this case, he is kindly invited to contact Applicants' below-signed representative, who would be happy to provide any assistance deemed necessary in speeding this application to allowance.

Respectfully submitted,

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